

(200)  
T612m  
76 879

DEPARTMENT OF THE INTERIOR  
UNITED STATES GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE  
U. S. ATOMIC ENERGY COMMISSION

PHOTOGEOLOGIC MAP, FREDONIA NW  
ARIZONA-COCONINO COUNTY  
TRACE ELEMENTS MEMORANDUM REPORT 879



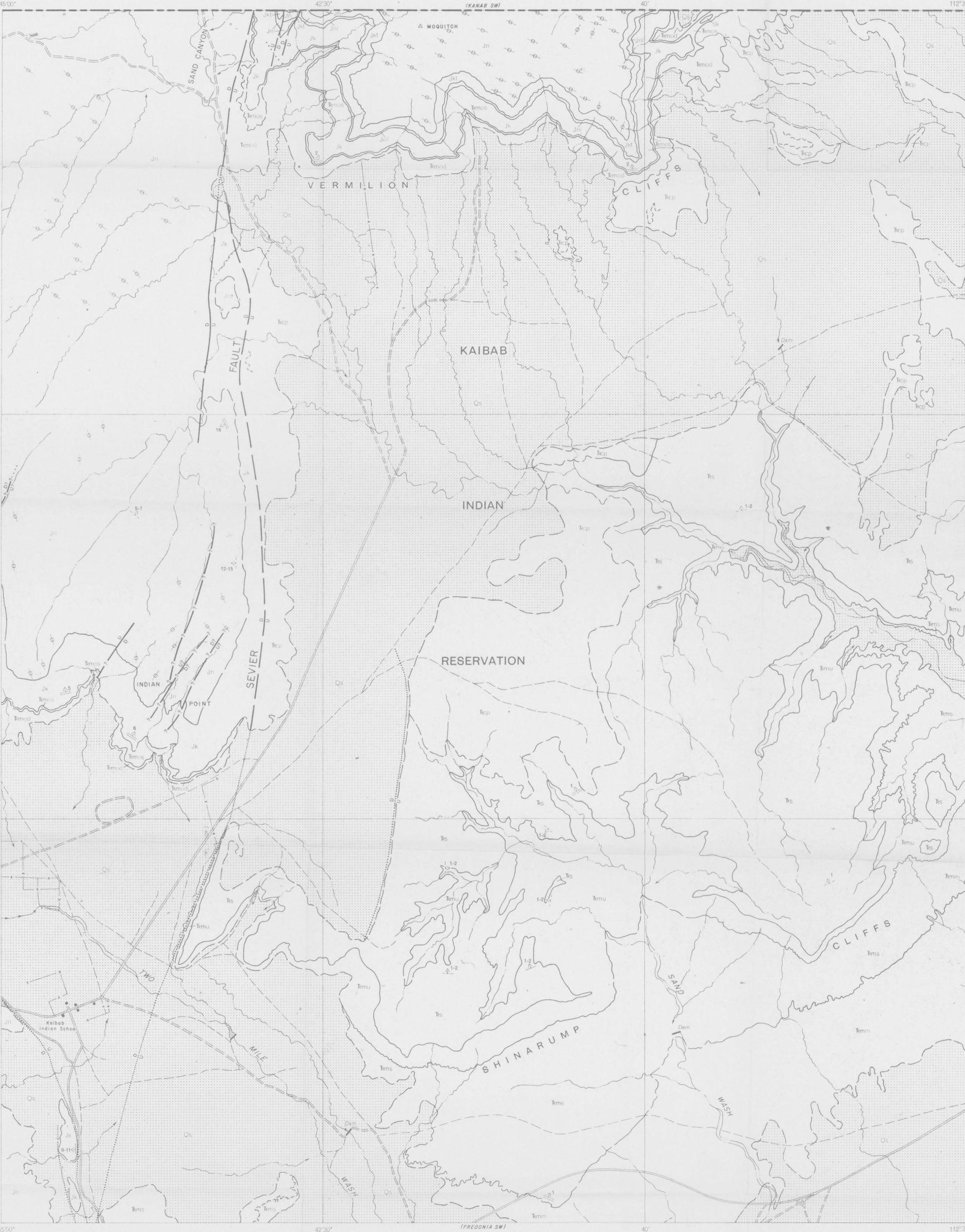
EXPLANATION

- Surficial deposits
- Navajo sandstone
- Kayenta formation, Jk  
May include the Lamb Point tongue of the Navajo sandstone
- Kayenta formation, Jkt, Jnl  
May include the Lamb Point tongue of the Navajo sandstone, Jnl
- Moenave formation  
Springdale sandstone member, Tmos; Dinosaur Canyon sandstone member, Tmod
- Petrified Forest member of the Chinle formation
- Shinarump conglomerate
- Moenkopi formation  
Upper red member, Tmu; Shinarump member, Tms; Middle red member, Tmm

Upper Triassic  
Lower and Middle(?) Triassic

- Contact  
Can be located within 30 feet horizontally.
- Contact  
Can be located within 30 to 200 feet horizontally.
- Contact  
Cannot be located accurately, probable error greater than 200 feet horizontally.
- Probable contact
- Resistant bed within a formation  
May be traceable only locally
- Fault  
Dashed where approximately located; dotted where concealed. Questioned where probable. U, upthrown side; D, downthrown side.
- Strike and dip of beds  
Computed by photogrammetric methods.
- Approximate strike and dip of beds  
Based on photointerpretation.
- Inferred strike and dip of beds  
Based on photointerpretation of areas where bedding is obscure.
- Strike of approximately vertical joints  
Based on photointerpretation.
- Linear feature uninterpretable on photograph  
May be geologically significant.
- Irrigation ditch
- State boundary
- Primary road
- Secondary road
- Trail
- Fence

West of the Sevier fault the Lamb Point tongue of the Navajo sandstone cannot be distinguished on the aerial photographs used in this interpretation and where present has been mapped with the Kayenta formation.



Base map compiled by U. S. Geological Survey from vertical aerial photographs. The aerial photographs used for photogeologic interpretation were taken in 1953. Roads as classified in this map series are as follows: Primary roads are maintained and graded, traversable by two-wheel drive vehicles; secondary roads are traversable possibly by two-wheel drive vehicles; trails are not traversable by four-wheel drive vehicles except locally. When other information is lacking, roads are classified by their appearance on aerial photographs.



PHOTOGEOLOGY BY W. R. HEMPHILL  
SCALE 1:24,000  
MAY 1955

This preliminary report is distributed without editorial and technical review for conformity with official standards and nomenclature. It is not for public inspection or quotation.

Stratigraphic column for this area modified from U. S. Geol. Survey Prof. Paper 220, 1950 and Averitt, Paul, Dettman, J. S., Harshbarger, J. W., and Rasmussen, C. A., unpublished field data. Geographic and geologic field data from Prof. Paper 220 and FWA, Public Roads Adm., Arizona Transp. Map, No. 2, 1944. This map has been compiled mainly from photogeologic data and has not been checked in the field. It is not the benefit of thorough evaluation with respect to maps compiled entirely from field data.

(SPRINGDALE SE)  
(SHORT CREEK NE)  
(SHORT CREEK SE)

(KANA SW)  
(FREDONIA SW)  
(FREDONIA SE)

JURASSIC(?) QUATERNARY and  
JURASSIC(?)  
TRIASSIC